IN THE CLAIMS:

Kindly cancel claims 1-4 and add new claims 5-24 as shown in the following listing of claims, which replaces all previous versions and listings of claims in this application.

5. (new) A wafer pattern observation method, comprising the steps of:

providing CAD data corresponding to patterns formed on a wafer;

determining a plurality of control points for the patterns formed on the wafer in accordance with an analysis of the CAD data;

acquiring coordinate data for the determined control points; and

sequentially positioning an observational field of view of a pattern observation device to observation positions on the patterns in accordance with the acquired coordinate data to obtain image data for the observation positions on the patterns.

6. (new) A method according to claim 5; wherein the determining step comprises the step of performing a lithographic simulation to obtain shapes of the patterns in accordance with an exposure state, a focusing state, or light intensity.

7. (new) A method according to claim 5; wherein the determining step comprises the steps of generating a device in accordance with the CAD data and determining the control points in accordance with electrical characteristics of the device.

8. (new) A method according to claim 5; wherein the determining step comprises the steps of carrying out a pattern formation simulation process to simulate the formation of a pattern using a gas amount or a gas diffusion time as a parameter and ascertaining problematic points of the formed pattern to determine the control points.

9. (new) A method according to claim 5; wherein the determining step comprises the steps of carrying out an etching simulation process to form a pattern by simulating a removal amount using exposure or etching fluid diffusion as a parameter and ascertaining problematic points of the formed pattern to determine the control points.

10. (new) A method according to claim 5; wherein the determining step comprises the step of ascertaining problematic points in the patterns using a CAD pattern density analysis method which analyzes a density of the patterns, portions of the patterns corresponding to positions changing from high density to low density, and an exposure image of the patterns.

11. (new) A method according to claim 5; wherein the positioning step further comprises the step of obtaining the image data at a low magnification factor so that observation centers of the control points are located in the observational field of view of the pattern observation device; and further comprising the steps of calculating an offset amount between the observation centers of the control points and corresponding centers of the observational field of view of the pattern observation device from the image data and the CAD data corresponding to the image data, performing relative positional control of the wafer in accordance with the calculated offset amount so that the observation centers of the control points are aligned with the centers of the observational field of view of the pattern observation device, and obtaining image data of the observation centers of the control points at a high magnification.

12. (new) A wafer pattern observation device comprising:

determining means for analyzing CAD data corresponding to patterns formed on a wafer and for determining a plurality of control points for the patterns in accordance with the analysis of the CAD data;

means for acquiring coordinate data for the control points determined by the determining means;

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a pattern observation device for observing the patterns; and

positioning means for automatically and sequentially positioning an observational field of view of the pattern observation device to observation positions on the patterns in accordance with acquired coordinate data to obtain image data for the observation positions on the patterns.

13. (new) A wafer pattern observation device according to claim 12; wherein the determining means includes means for performing a lithographic simulation in accordance with the CAD data to determine the control points.

14. (new) A wafer pattern observation device according to claim 12; wherein the determining means includes means for generating a device in accordance with the CAD data and determining the control points in accordance with electrical characteristics of the device.

15. (new) A wafer pattern observation device according to claim 12; wherein the determining means includes means for carrying out a pattern formation simulation process to simulate the formation of a pattern using a gas amount or a gas diffusion time as a parameter and for ascertaining problematic points of the formed pattern to determine the control points.

16. (new) A wafer pattern observation device according to claim 12; wherein the determining means includes means for carrying out an etching simulation process to form a pattern by simulating a removal amount using exposure or etching fluid diffusion as a parameter and for ascertaining problematic points of the formed pattern to determine the control points.

17. (new) A wafer pattern observation device according to claim 12; wherein the determining means includes means for ascertaining problematic points in the patterns using a CAD pattern density analysis method which analyzes a density of the patterns, portions of the patterns corresponding to positions changing from high density to low density, and an exposure image of the patterns.

18. (new) A wafer pattern observation device according to claim 12; wherein the positioning means includes means for obtaining the image data at a low magnification factor so that observation centers of the control points are located in the observational field of view of the pattern observation device; and further comprising calculating means for calculating an offset amount between the observation centers of the control points and corresponding centers of the observational field of view of the pattern observation device

from the image data and the CAD data corresponding to the image data.

19. (new) A wafer pattern observation device according to claim 18; wherein the positioning means includes means for performing relative positional control of the wafer in accordance with the offset amount calculated by the calculating means so that the observation centers of the control points are aligned with the centers of the observational field of view of the pattern observation device.

20. (new) A wafer pattern observation device according to claim 19; further comprising means for obtaining image data of the observation centers of the control points at a high magnification.

21. (new) A wafer pattern observation method, comprising the steps of:

acquiring pattern data corresponding to a pattern formed on a wafer;

determining a plurality of control points for the wafer pattern in accordance with an analysis of the acquired pattern data;

acquiring coordinate data for the determined control points; and

sequentially positioning an observational field of view of a pattern observation device to observation positions on the wafer pattern in accordance with the acquired coordinate data to obtain image data corresponding to the observation positions for observing the wafer pattern.

22. (new) A method according to claim 21; wherein the determining step comprises the step of performing a lithographic simulation in accordance with the acquired pattern data to determine the control points.

23. (new) A method according to claim 21; wherein the positioning step further comprises the step of obtaining the image data at a low magnification factor so that observation centers of the control points are located in the observational field of view of the pattern observation device.

24. (new) A method according to claim 23; further comprising the steps of calculating an offset amount between the observation centers of the control points and corresponding centers of the observational field of view of the pattern observation device from the image data and the pattern data, performing relative positional control of the wafer in accordance with the calculated offset amount so that the observation centers of the control points are aligned with the centers of the observational field of view of the pattern

observation device, and obtaining image data of the observation centers of the control points at a high magnification.